

Claims

1           1. A system for enabling voiced utterances to be substituted  
2 for manipulation of a pointing device, the pointing device being  
3 of the kind which is manipulated to control motion of a cursor on  
4 a computer display and to indicate desired actions associated with  
5 the position of the cursor on the display, the cursor being moved  
6 and the desired actions being aided by an operating system in the  
7 computer in response to control signals received from the pointing  
8 device, the computer also having an alphanumeric keyboard, the  
9 operating system being separately responsive to control signals  
10 received from the keyboard in accordance with a predetermined  
11 format specific to the keyboard, the system comprising

12           a voice recognizer for recognizing a voiced utterance, and  
13           an interpreter for converting the voiced utterance into  
14 control signals which will directly create a desired action aided  
15 by the operating system in the computer without first being  
16 converted into control signals expressed in the predetermined  
17 format specific to the keyboard.

1           2. A method for converting voiced utterances to commands,  
2 expressed in a predefined command language, to be used by an  
3 operating system of a computer, comprising

4           converting some voiced utterances into commands corresponding  
5 to actions to be taken by said operating system, and

6           converting other voiced utterances into commands which carry  
7 associated text strings to be used as part of text being processed  
8 in an application program running under said operating system.

1           3. A method of generating a table for aiding the conversion  
2 of voiced utterances to commands for use in controlling an  
3 operating system of a computer to achieve desired actions in an  
4 application program running under the operating system, said  
5 application program including menus and control buttons, said  
6 method comprising

7           parsing the instruction sequence of the application program  
8 to identify menu entries and control buttons, and

9           including in said table an entry for each menu entry and  
10 control button found in said application program, each said entry  
11 containing a control command corresponding to said menu entry or  
12 control button.

1           4. A method of enabling a user to create an instance in a  
2 formal language of the kind which has a strictly defined syntax,  
3 comprising

4           providing a graphically displayed list of entries which are  
5 expressed in a natural language and which do not comply with said  
6 syntax,

7           permitting the user to point to an entry on said list, and

8           automatically generating said instance corresponding to the  
9 identified entry in the list in response to said pointing.